

Appl. No. 09/683,355
Response Dated April 7, 2005
Reply to Office Action of January 11, 2005

REMARKS

This Amendment, submitted in response to the non-final Office Action dated January 11, 2005, is believed to be fully responsive to the points of rejection raised therein. Accordingly, a favorable reconsideration based on the merits is respectfully requested.

Claim 1 was rejected under 35 U.S.C. § 103 (a) as being unpatentable over US Patent 3893129 (hereinafter "Endo") in view of US Patent 5325177 (hereinafter "Peterson"). Claim 4 was rejected under 35 U.S.C. § 103 (a) as being unpatentable over Endo in view of Peterson and further in view of US Patent 5048044 (hereinafter "Ireland"). Claims 5 and 9 were rejected under 35 U.S.C. § 103 (a) as being unpatentable over Endo in view of US Patent 5811127 (hereinafter "Pryor"). Claims 6, 7, and 10 were rejected under 35 U.S.C. § 103 (a) as being unpatentable over Endo in view of Pryor and further in view of US Patent 5811127 (hereinafter "Sprague"). In this amendment, claims 1, 3, 5 and 9 have been amended. Claim 2 has been canceled. No new matter has been added.

Claims 1 and 3 – 10 remain pending in this application. Reconsideration in view of the above amendments and following remarks is respectfully requested.

35 U.S.C. § 103 (a)

Claim 1 was rejected under 35 U.S.C. § 103 (a) as being unpatentable over Endo in view of Peterson. Claim 4 was rejected under 35 U.S.C. § 103 (a) as being unpatentable over Endo in view of Peterson and further in view of Ireland. Claims 5 and 9 were rejected under 35 U.S.C. § 103 (a) as being unpatentable over Endo in view of Pryor. Claims 6, 7, and 10 were rejected under 35 U.S.C. § 103 (a) as being unpatentable over Endo in view of Pryor and further in view of Sprague. In this amendment, claims 1, 3, 5 and 9 have been amended. Claim 2 has been canceled. No new matter has been added. Applicants respectfully traverse the rejection of claims 1, 4-7, 9 and 10 under 35 USC § 103(a).

To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art.

Independent method claim 1 has been amended to incorporate the allowable subject matter of claim 2. Thus, the rejection under 35 U.S.C. § 103 (a) over Endo in view of Peterson has been obviated. Claim 2 has been canceled. Dependent claim 3 has been amended so that it depends on claim 1 now instead of claim 2.

Each of the independent method claims 5 and 9 has been amended to incorporate the allowable subject matter of claim 2. Each of the independent claims 5 and 9 now recite the 'reducing speckle noise' step includes observing a laser light scatter distribution on the surface of the object, wherein the size of the speckle noise observed through the lens by the detector in the image is determined by a convolution of the inverse Fourier transform of the

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laser light scatter distribution, and an impulse response of the lens.

Endo does not teach, suggest or disclose each and every element of Applicants' invention as recited in amended independent Claims 5 and 9. Specifically, Applicants' invention recites observing a laser light scatter distribution on the surface of the object, wherein the size of the speckle noise observed through the lens by the detector in the image is determined by a convolution of the inverse Fourier transform of the laser light scatter distribution, and an impulse response of the lens. The Endo reference merely discloses a light beam recording device, and more particularly to a device for recording information on a recording medium by use of a collimated light beam of high intensity such as a laser beam. The Endo reference is focused on providing with an automatic focusing means to enhance the resolving power of the recorded information. Nowhere is there recognition in Endo of the importance or implementation of observing a laser light scatter distribution on the surface of the object. As such, Endo does not disclose every element of Applicants' invention as recited in claims 5 and 9. Therefore, the present invention, as claimed in amended independent claims 5 and 9 is not obvious over Endo.

This limitation of Endo is not overcome by the Pryor reference. The Pryor reference relates to a method and apparatus for optically determining the dimension of part surfaces. The Pryor reference is focused on describing optical triangulation based coordinate measurement machines capable of accurate measurement of complex surfaces, such as gear teeth and turbine blades. Nowhere is there recognition in Pryor of the importance or implementation of observing a laser light scatter distribution on the surface of the object. As such, Pryor does not disclose every element of Applicants' invention as recited in claims 5 and 9. Therefore, the present invention, as claimed in amended independent claims 5 and 9 is not obvious over Pryor.

In view of the above, the combination of Endo and Pryor, as suggested in the Office Action, would not meet the limitations of Applicant's claimed invention as recited in amended independent claims 5 and 9.

Accordingly, Applicants respectfully submit that the claimed invention, as recited in amended independent claims 1, 5 and 9 is patentable over any combination of one or more of Endo, Peterson, Ireland, Pryor and Sprague references. Amended dependent claim 3 depends from independent claim 1 and therefore is in condition for allowance over any combination of Endo and Pryor references for the reasons discussed above. Each of the rejected dependent claims 4, 6, 7 and 10 depends from an independent claim which the Applicants believe to be in condition for allowance over any combination of one or more of Endo, Peterson, Ireland, Pryor and Sprague references for the reasons discussed above. More specifically, claim 4 depends directly from claim 1; claims 6, 7 depend directly from claim 5; claim 10 depends directly from claim 9. Applicants respectfully submit that claims 1, 5 and 9 are patentably distinct from the applied references for the reasons discussed above and that claims 4, 6, 7 and 10 are similarly allowable over the applied references based on their dependency. It is respectfully requested that the rejections be withdrawn.

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CONCLUSION

In view of the foregoing, Applicants respectfully submit that the application is in condition for allowance. Favorable reconsideration and prompt allowance of the application are respectfully requested.

Should the Examiner believe that anything further is needed to place the application in even better condition for allowance, the Examiner is requested to contact Applicants' undersigned representative at the telephone number below.

Respectfully submitted,



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